BEL MARIN KEYS UNIT V EXPANSION OF THE HAMILTON WETLANDS RESTORATION PROJECT NOVATO, MARIN COUNTY, CALIFORNIA

EXECUTIVE SUMMARY

Introduction

This study, prepared in cooperation with the non-Federal sponsor, the California State Coastal Conservancy (SCC), provides a general re-evaluation of the Hamilton Wetland Restoration Project (HWRP, authorized in WRDA '99) and identifies a feasible expansion of the project. As authorized, the HWRP will beneficially re-use approximately 10.6 million cubic yards (mcy) of dredged material to restore habitat on 950 of the 988 acres of former Hamilton Army Airfield (HAAF) and the adjacent State Lands Commission (SLC) property. If reauthorized to include the Bel Marin Keys Unit V (BMKV) parcel, the expanded HWRP would beneficially re-use 24.4 mcy of dredged material to restore a total of 2,526 acres of habitat on the enlarged 2,600-acre project site (1,576 acres of habitat on 1,612 acre expansion site). A Supplemental Environmental Impact Report / Environmental Impact Statement (SEIR/EIS) accompanies this General Reevaluation Report.

Location and Study area

The study area is located 25 miles north of San Francisco in the City of Novato, Marin County, California, on the west side of San Pablo Bay (Figure 2-1). The study area covers 2,600 acres including 6 acres of levee easement from the City of Novato and consists of five parcels of land: the 644-acre Hamilton airfield parcel, the 18-acre Navy ballfields, the 319-acre SLC property, the 1,610-acre BMKV parcel, and 2 acres of the 'Bulge' parcel currently owned by the City of Novato (Figure 2-2). The remainder of the original 2,184-acre air base has been sold for private development (except for one area retained by the Coast Guard).

Objectives

Diking or filling tidal areas for land reclamation has destroyed most of the tidal wetlands that historically fringed San Francisco Bay. The project expansion site, which was historically dominated by tidal salt marsh habitat, was converted over the last 150 years to agricultural use. The Hamilton Wetlands Restoration Project is part of the growing effort to restore portions of these former salt marshes and thereby provide increased areas of this threatened vital wildlife habitat. The project is also pivotal to the goals of local resource agencies as expressed in the Long Term Management Strategy (LTMS) for San Francisco Bay. The LTMS sets plans and target goals to maximize the beneficial re-use of dredged material and minimize open water in-bay disposal from navigational maintenance and channel deepening projects. The expanded HWRP site would have a

capacity to accommodate up to 24.4 mcy of dredged material and therefore presents a significant opportunity to facilitate the objectives of the LTMS.

There are two project objectives: (1) create a diverse array of wetland and wildlife habitats that benefit a number of threatened, endangered and other species, and (2) reduce open-water dredged material disposal and beneficially re-use that material to the maximum extent practicable.

The project fulfills both the Federal interest requirements and the needs of the non-Federal sponsor, SCC. The wetland restoration plan formulation involved extensive coordination with SCC, the San Francisco Bay Conservation and Development Commission (BCDC), the City of Novato, various federal and state agencies, organizations, and the public.

Planning Constraints

Two endangered species, the California Clapper Rail and Salt Marsh Harvest Mouse, may be present on portions of the site. While the project would greatly increase habitat for both species, protective measures during certain construction activities, or during nesting periods, may be required to insure no disturbance to the existing salt marsh habitat on the bayside of the levees that these animals may currently occupy.

Another concern is chemical suitability standards for use of dredged material for wetland creation. Only dredged materials that have chemical concentrations and sediment toxicity below levels that could harm wetland biota will be accepted for this project.

The Novato Sanitary District (NSD) outfall pipeline runs through a 20-foot wide easement for two miles along the north boundary of the airfield and south boundary of the SLC property. Currently, along this pipeline on the SCC parcel is a dechlorination facility. This facility will be relocated out of the project area. The New Hamilton Partners (NHP) storm-water discharge outlet must also be protected.

Final Array of Alternatives Considered

No action

Under the No Action Plan, HWRP would proceed as authorized. The BMKV parcel would not be included and delays due to HTRW remediation could occur. The environmental benefits of the proposed expansion project would not be realized.

Alternative 1, Beneficial Reuse of Dredged Material with Expanded Pacheco Pond

This alternative would result in 1,089 acres of wetland habitats and 487 acres of other upland, open water and subtidal habitats, for a total of 1,576 acres of habitat creation. Dredged material would be used to accelerate marsh establishment.

Alternative 2, Beneficial Reuse of Dredged Material with Seasonal Wetlands and Expanded Pacheco Pond

As initially proposed, this alternative would result in 1,249 acres of wetland habitats and 327 acres of other upland, open water and subtidal habitats, for a total of 1,576 acres of habitat creation. However, after review of comments received during the public review period, this alternative was modified. Revised Alternative 2 would result in 1,188 acres of wetland habitats and 388 acres of other upland, open water and subtidal habitats, for a total of 1,576 acres of habitat creation. Dredged material would be used to accelerate marsh establishment and raise elevations for seasonal wetlands.

Alternative 3, Natural Sedimentation

This alternative would result in 1,284 acres of wetland habitats and 292 acres of other upland, open water and subtidal habitats, for a total of 1,576 acres of habitat creation, approximately 50 years in the future. Once outboard levees are breached, tidal sedimentation would slowly fill the tidal portions of the project.

Comparison of Alternatives

Prior to the public review period, Alternative 2 was selected because it provided the greatest diversity of habitat, allowed for most efficient beneficial reuse of dredged material, provided critical endangered species habitat in the shortest amount of time, replaced the greatest amount of seasonal wetland and allowed the greatest degree of operational flexibility. Given all these considerations, Alternative 2 best addressed the study objectives of ecosystem restoration and beneficial reuse of dredged material.

After consideration of the comments provided by agencies, individuals, and organizations on the document, design requirements, and environmental factors and review of the project goals and objectives, Alternative 2 was revised. Chapter 4 provides a comparison of alternatives, including Revised Alternative 2. The analyses show that beneficial reuse of dredged material would provide faster wetland restoration than natural sedimentation. In addition, the use of dredged material would provide a greater diversity of habitat. The project is cost-effective at maximizing outputs, meeting objectives and fulfilling both the Federal interest requirements and the needs of the non-Federal sponsor.

The Selected Plan

Revised Alternative 2, Beneficial Reuse of Dredged Material with Seasonal Wetland and Expanded Pacheco Pond, was selected because it provides the greatest diversity of habitat, allows for beneficial reuse of the greatest quantity of dredged material, provides critical endangered species habitat in the shortest amount of time, and replaces the greatest amount of seasonal wetland. Given all these considerations, Revised Alternative 2 best addresses the study objectives of ecosystem restoration and beneficial reuse of dredged material. Revised Alternative 2 also best addresses the other evaluation criteria of completeness, effectiveness, efficiency, and acceptability, while minimizing ongoing management. Therefore, it is the selected plan.

Summary of Costs

The total project implementation cost for the combined project is the cost to design and construct the project, including dredged material transportation costs that exceed current dredged material hauling costs, as described in Chapter 6 of this report. Total project implementation costs will be shared by the non-Federal sponsor, navigation projects in the San Francisco Bay (both Federal and non-Federal), and the Federal Construction General program.

The total project implementation cost for the combined Hamilton Wetland Restoration Project and Bel Marin Keys expansion project is estimated to be $301,700,000, to be funded as follows: non-Federal sponsor: $47,100,000, Federal and non-Federal navigation projects: $113,400,000, and HWRP/BMKV Federal Construction General funds: $141,200,000. For the combined HWRP and BMKV Expansion Project, the total annual operations and maintenance (O&M) cost would be $886,000.

The navigation projects' contributions must be subtracted from the total project implementation cost to determine the total project first cost. This is necessary to avoid redundant Federal appropriations for these projects. The total project first cost defines the Congressionally authorized project cost.

The total first project cost for the combined project is $188,300,000 under fourth quarter 2002 prices; this figure will form the basis of cost-sharing. The Federal share is currently estimated at $141,200,000. The non-Federal share is currently estimated to be $47,100,000.

The implementation cost of the Bel Marin Keys expansion portion of the project is estimated to be $182,700,000. This cost would be funded as follows: non-Federal sponsor: $33,400,000 ($33,309,260 restoration and $90,740 recreation). Federal and non-Federal navigation projects: $49,100,000, and the Federal Construction General program: $100,200,000 ($100,109,260 restoration and $90,740 recreation). For the BMKV expansion portion, the total annual operations and maintenance (O&M) cost would be $525,000.

List of Acronyms

APE - Area of Potential Effects
BA - Biological Assessment
BCDC - San Francisco Bay Conservation and Development Commission
BMKV – Bel Marin Keys Unit V
BRAC - Base Realignment and Closure Act
BO - Biological Opinion
CAR - Coordination Act Report
CDFG - California Department of Fish and Game
CEQA - California Environmental Quality Act
cfs - Cubic feet per second
Corps - US Army Corps of Engineers
cy - cubic yards
CSD – Bel Marin Keys Community Services District
CZMA - Coastal Zone Management Act
DCAR - Draft Coordination Act Report
DMMO - Dredged Material Management Office
EIR - Environmental Impact Report
EIS - Environmental Impact Statement
EIS/R - Environmental Impact Statement/Report
    DEIS/R - Draft Environmental Impact Statement/Report
    FEIS/R - Final Environmental Impact Statement/Report
    SEIS/R – Supplemental Environmental Impact Statement/Report
EO - Executive Order
EPA - Environmental Protection Agency
EQ - Environmental Quality
ER - Engineering Regulation
ERA - Ecological Risk Assessment
ESA - Endangered Species Act
FCSA - Feasibility Cost Sharing Agreement
FUDS - Formerly Utilized Defense Sites
FWS - Fish and Wildlife Service
FY - Fiscal Year
GRR – General Reevaluation Report
HAAF - Hamilton Army Air Field
HEP - Habitat Evaluation Procedure
HRG - Hamilton Restoration Group
HTRW - Hazardous, Toxic and Radiological Waste
HU - Habitat Unit
HWRP – Hamilton Wetland Restoration Project
IDC - Interest During Construction
IDIQ - Indefinite Delivery, Indefinite Quantity
LERRDS - Lands, Easements, Rights of Way, Relocations, and Disposal Sites
LGVSD - Las Gallinas Valley Sanitary District
LTMS - Long Term Management Strategy

MCACES - Corps of Engineers Micro Computer Aided Cost Estimating System
MCFCWCD - Marin County Flood Control and Water Conservation District
mcy - million cubic yards
MHW - Mean High Water
MHHW - Mean Higher High Water
MLW - Mean Low Water
MLLW - Mean Lower Low Water
NED - National Economic Development
NEPA - National Environmental Policy Act
NGVD - National Geodetic Vertical Datum of 1929
NHP - New Hamilton Partnership
NOAA - National Oceanic and Atmospheric Administration
NMFS - National Marine Fisheries Service
NSD - Novato Sanitary District
O&M - Operations and Maintenance
OMRR&R - Operation, Maintenance, Repair, Replacement and Rehabilitation Requirements
OSE - Other Social Effects
PAC – Post-Authorization Change
PCA - Project Cooperation Agreement
PED - Pre-Construction Engineering and Design
P&G – US Water Resources Council's Principles and Guidelines
PG&E – Pacific Gas and Electric
PSP - Project Study Plan
RED - Regional Economic Development
RWQCB - San Francisco Bay Regional Water Quality Control Board
SCC - California State Coastal Conservancy
SHPO - State Historic Preservation Officer
SLC - California State Lands Commission
USACE - United States Army Corps of Engineers
WRDA - Water Resources Development Act

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